



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

III.

Note to the Article “On the Theory of Flexure,” at page 13 (Vol. II) of this Journal.

By WILLIAM H. BURR, *Rensselaer Polytechnic Institute*.

FROM the somewhat speculative nature of the article on the Theory of Flexure, resulting from the absence of experimental data on the “viscosity” of materials, it may be permissible to consider constant the intensity of stress in any section of a bent beam along a line parallel to the neutral axis of that section. Various considerations seem to indicate such a condition of stress. It is evident that that condition would accompany the greatest imaginable resistance which the beam could offer to external bending forces.

In order to represent this case for any beam not rectangular in section, it will only be necessary to put, in equation (74) of the article in question, consistently with the notation used in equation (46), $f(y)$ for each z_i found in the parenthesis, and $2dy$ for b . The general value for the bending moment then becomes

$$M = 4 \frac{N_0}{\log z_i} \int_1^{y_1} \left(\frac{1}{4} f(y)^2 \log \frac{f(y')^2}{e} - f(y) \log \frac{f(y')}{e} - \frac{3}{4} \right) dy'.$$

The value, for a rectangular section, will not be changed.

TROY, N. Y., 18 July, 1879.

IV.

Generalization of Leibnitz’s Theorem in Statics.

Extract of a Letter from PROFESSOR CROFTON, Royal Military Academy, Woolwich, to PROFESSOR SYLVESTER.

..... A small remark occurred to me the other day, which, it seems to me, can hardly have escaped notice, but no one that I know has met it. It is an extension of Leibnitz’s Theorem in Statics: “If any number of forces